

What Is Claimed Is:

1           1. A system for continuously coating  
2 cores of gum material comprising:

3           at least one elongated rotating drum member  
4 having a first end and a second end, said drum member  
5 being tilted at an angle relative to horizontal;

6           the cores of gum material being introduced  
7 into said drum member at said first end and being  
8 removed from said drum member at said second end,

9           a plurality of nozzles positioned in said  
10 drum member for applying coating materials on the  
11 cores of gum material in said drum as said cores of  
12 gum material proceed through said drum member from  
13 said first end to said second end; and

14          a supply of heated air, said air being  
15 introduced into said drum in order to dry the coating  
16 materials as they are applied to the cores of gum  
17 material;

18          wherein said cores of material are  
19 processed in said drum member on a first in-first out  
20 basis.

1           2. The system as recited in claim 1  
2 wherein at least two drum members are provided in  
3 series, and wherein said system further comprises a  
4 conveyer mechanism for transporting said cores of gum  
5 material from a first drum member to a second drum  
6 member.

1           3. The system as recited in claim 1  
2 further comprising a batch-type mixer mechanism for  
3 providing an initial coating of material on said  
4 cores of gum material before they are introduced into  
5 said drum member.

1           4. The system as recited in claim 1  
2 wherein said coating materials are in a liquid form  
3 and are applied to said cores of gum material by  
4 spraying.

1           5. The system as recited in claim 1  
2 wherein said coating materials are in a dry powder  
3 form.

1           6. A method for continuously coating  
2 cores of gum material comprising:

3           (a) continuously introducing cores of gum  
4 material into an inlet end of a rotating drum member;

5           (b) transporting the cores of gum material  
6 from said inlet end to an outlet end of said drum  
7 member;

8           (c) applying a coating material on said  
9 cores of gum material inside said drum member;

10          (d) drying said coating cores of gum  
11 material by circulation of heated air inside said  
12 drum member; and

13          (e) inclining said drum member relative to  
14 the horizontal in order to insure that the first  
15 cores of gum material introduced into said inlet end

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16 of said rotating drum member are substantially the  
17 first cores of gum material to be exhausted from said  
18 outlet end of said drum member.

1           7. The method as recited in claim 6  
2 further comprising the step of applying at least one  
3 initial coating of material on the cores of gum  
4 material prior to step (a).

1           8. The method as recited in claim 6  
2 wherein at least two drum members are provided and  
3 said method further comprises the step of  
4 transporting the cores of gum material from a first  
5 drum member to a second drum member.

1           9. The method as recited in claim 8  
2 further comprising the step of changing the formula  
3 of said coating material from the coating material  
4 used to form said at least one initial coating of  
5 material to the coating material used to introduce  
6 into said drum member.

1           10. The method as recited in claim 8  
2 further comprising the step of providing a first  
3 formula of coating material used to introduce into  
4 said first drum member and a second and different  
5 formula of coating material used to spray into said  
6 second drum member.

1           11. A method as recited in claim 8 further  
2 comprising the step of providing drying air into said

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3 first drum member at a lower temperature than the  
4 drying air introduced into said second drum member.

1           12. A method as recited in claim 6 wherein  
2 said coating materials are applied by spraying in a  
3 liquid form.

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